

WHAT IS CLAIMED IS:

1. A HeLa-S3 cell comprising a replication-competent adenovirus vector.
2. The HeLa-S3 cell of Claim 1, wherein said replication-competent adenovirus vector is tumor or tissue-specific.
- 5 3. The HeLa-S3 cell of Claim 1, wherein said tumor-specific replication-competent adenovirus vector comprises a mutation or deletion in the E1b gene, wherein the encoded E1b protein lacks the capacity to bind p53.
4. The HeLa-S3 cell of Claim 1, wherein said tumor-specific replication-competent adenovirus vector comprises a mutation or deletion in the E1a gene, wherein the encoded E1a
10 protein lacks the capacity to bind RB.
5. The HeLa-S3 cell of Claim 1, wherein said vector comprises a heterologous transcriptional regulatory element (TRE) sequence operatively linked to the coding region of a gene that is essential for replication of said vector, wherein said TRE functions in said cell so that replication of the vector occurs in said cell.
- 15 6. The HeLa-S3 cell of Claim 5, wherein said TRE comprises a promoter or enhancer.
7. The HeLa-S3 cell of Claim 5, wherein said TRE is selected from the group consisting of an E2F-responsive TRE, a human telomerase reverse transcriptase (hTERT) TRE, an osteocalcin TRE, a carcinoembryonic antigen (CEA) TRE, a DF3 TRE, an α -fetoprotein TRE, an ErbB2 TRE, a surfactant TRE, a tyrosinase TRE, a PRL-3 TRE, a
20 MUC1/DF3 TRE, a TK TRE, a p21 TRE, a cyclin TRE, an HKLK2 TRE, a uPA TRE, a HER-2neu TRE, a prostate specific antigen (PSA) TRE, and a probasin TRE.
8. The HeLa-S3 cell of Claim 5, wherein said coding region that is operatively linked to said TRE is selected from the group consisting of E1a, E1b, E2a, E2b and E4 coding regions.
- 25 9. The HeLa-S3 cell of Claim 8, wherein said coding region is an E1a coding region.
10. The HeLa-S3 cell of Claim 8, wherein said coding region is an E1b coding region.

11. The HeLa-S3 cell of Claim 8, wherein said coding region is an E2a coding region.
12. The HeLa-S3 cell of Claim 8, wherein said coding region is an E2b coding region.
13. The HeLa-S3 cell of Claim 8, wherein said coding region is an E4 coding region.
14. The HeLa-S3 cell of Claim 5, wherein said vector further comprises a second
5 heterologous TRE operatively linked to the coding region of a second gene that is essential for
replication of said vector, wherein said second TRE functions in said cell so that replication of
the vector occurs in said cell.
15. The HeLa-S3 cell of Claim 14, wherein the first and second heterologous TRE
sequences are different.
- 10 16. The HeLa-S3 cell of Claim 5, wherein said vector further comprises a heterologous
gene.
17. The HeLa-S3 cell of Claim 16, wherein said heterologous gene encodes GM-CSF.
18. A producer cell line comprising the cell of Claim 1.
19. A producer cell line comprising the cell of Claim 5.
- 15 20. A method of producing a replication-competent adenovirus, comprising culturing
the HeLa-S3 cell of claim 1 and recovering said adenovirus from said cell or the supernatant of
said cell.
21. A method of producing a replication-competent adenovirus, comprising culturing
the HeLa-S3 cell of Claim 5 and recovering said adenovirus from said cell or the supernatant
20 of said cell.
22. The method according to Claim 21, wherein said TRE comprises a promoter or
enhancer.
23. The method according to Claim 22, wherein said TRE is selected from the group
consisting of an E2F-responsive TRE, a human telomerase reverse transcriptase (hTERT)
25 TRE, an osteocalcin TRE, a carcinoembryonic antigen (CEA) TRE, a DF3 TRE, an α -
fetoprotein TRE, an ErbB2 TRE, a surfactant TRE, a tyrosinase TRE, a PRL-3 TRE, a

MUC1/DF3 TRE, a TK TRE, a p21 TRE, a cyclin TRE, an HKLK2 TRE, a uPA TRE, a HER-2neu TRE, a prostate specific antigen (PSA) TRE, and a probasin TRE.

24. The method according to Claim 21, wherein said coding region that is operatively linked to said TRE is selected from the group consisting of E1a, E1b, E2a, E2b and E4 coding regions.

25. The method according to Claim 24, wherein said vector further comprises a heterologous gene.

26. The method according to Claim 25, wherein said heterologous gene encodes GM-CSF.

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